## **Abstract**

## "Understanding and Applying Cost Categories to the Cost Estimating Process"

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Although many organizations are beginning to reengineer themselves into project-oriented businesses and are realizing the benefits of project management training, few provide or understand the need for financial training for their project managers. Most companies still take the view that cost estimating and, in particular, assignment of the various labor and other business rates is the special domain of the comptroller's shop (or even the president of the company). With changing business climates, especially in fast moving, high technology industries, the project manager is required to take on more responsibility for cost estimating as well as for preparing a final price. This situation is particularly true in those companies that survive on competitive bidding.

It is common practice for each department involved in a project to submit estimates on all anticipated costs. These costs consist of direct labor hours (both hourly and managerial), materials, vendor items, subcontracted work, consultants, capital equipment, and any other direct costs associated with the proposed work.

Many times, however, project estimates have no relationship to the expected cost of the work because certain tasks may be so complex or the effort may be so completely new to the departments that it is impossible to cost the work accurately. In that event, the tendency is to develop a "best guess" based on comparisons with other, similar projects. This method is acceptable in certain circumstances, but it can lead to disastrously incorrect estimates unless projections are derived from strong historical data. In other words, checks and balances must be embedded in the costing process, and each department must follow rigorous, standard practices and reviews.

Another problem common to most costing or cost estimating processes is the practice of management—both middle and senior levels—to increase or decrease the price, if it is to be a bid for a contract, arbitrarily after an estimate has been developed. This practice is so widespread that there is virtually no bid submitted in which the estimated cost has not been reduced based entirely on the opinion of senior management that the estimate—accurate or not—cannot be competitive. These decreases or increases in costs are generally made on an individual basis rather than on any kind of systematic attempt to maximize the company's profits.

This presentation examines the common problems associated with accurate project cost estimating and the cost elements that every project manager should understand relative to developing the cost and budget estimate. It will also provide a universal project cost estimating format and will explain all the cost entries that have to be included to derive the final cost (and price if the estimate is part of a bid). Finally, a project-estimating model will be provided for establishing a formalized, documented, and company standard process for estimating project costs.

